#### **IN THE SPECIFICATION**

Please amend the following paragraphs:

the paragraph beginning on page 1, line 1:

### -- BACKGROUND OF THE INVENTION

A

The invention relates to speech processing, such as speech recognition or speech coding, of a degraded speech signal. --

the paragraph beginning on page 2, line 24:

## -- SUMMARY OF THE INVENTION



It is an object of the invention to provide a speech processing method and speech processing system capable of improved speech processing particularly under adverse conditions. --

the paragraph beginning on page 4, line 14:

### -- BRIEF DESCRIPTION OF THE DRAWINGS



These and other aspects of the invention will be apparent from and elucidated with reference to the embodiments shown in the drawings.--

the paragraph beginning on page 4, line 30:

# -- DETAILED DESCRIPTION OF THE INVENTION



General description of a speech recognition system.--

the three consecutive paragraphs beginning on page 3, line 15:

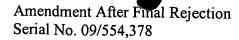
-- As described in one embodiment of the invention the dependent claim 2, the estimate of the originally uttered speech is based on a predetermined processing model  $\Lambda_x$ . Preferably, the estimate is based on a Maximum Likelihood Estimation (MLE). For instance, the MLE approach of US 5,727,124 may be used, wherein the estimated original speech  $\hat{X}$  is given by:  $\hat{X} = F_v(Y)$ , where the parameters v are given by:  $v = \arg\max_v P\left\{\hat{X}, v \mid S, \Lambda_x\right\}$ .

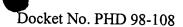
As described in another embodiment of the invention the dependent claim 3, the processing model used for estimating the original speech is the model  $\Lambda_x(\xi)$  selected to match the estimated signal condition  $\xi$ . In this way the accuracy of estimating the original signal is increased.

As described in <u>still another embodiment of the invention</u>the dependent elaim 4, an iterative procedure is used, wherein in each iteration, the signal condition is re-estimated, a new model is selected based on the new signal condition, and a new estimate is made of the original speech (using the then selected model). The model which was selected first acts as a discrimination seed for the further bootstrap operations. The iteration stops when a criterion is met (e.g. the recognition with the then selected model is adequate or no longer improves (e.g. gets worse) compared to a likelihood obtained by a previous recognition). The iteration process may start with a conservative estimate of the degradation of the signal (e.g. a relatively high SNR), where in each iteration the signal condition is degraded (e.g. a lower SNR is selected).--

the paragraph beginning on page 13, line 13:







-- N is the number of state of the models and  $s_{i,\Lambda}$  denotes the ith state of the models  $\Lambda$ .

Note that the KL information is not symmetric. So, we define a symmetrically symmetrical relative divergence between two models as follows. --

